

**Montana Board of Oil and Gas Conservation
Environmental Assessment**

Operator: Armstrong Operating, Inc.
Well Name/Number: Schultes #1
Location: SE SE Section 3 T30N R46E
County: Roosevelt, MT; **Field (or Wildcat)** W/C

Air Quality

(possible concerns)

Long drilling time: No, 20 to 30 days drilling time.
Unusually deep drilling (high horsepower rig): No, big double derrick drilling rig or a small triple derrick drilling rig to drill to 7,575' TD.
Possible H2S gas production: Yes
In/near Class I air quality area: No
Air quality permit for flaring/venting (if productive): Yes, DEQ air quality permit required under 75-2-211.

Mitigation:

- Air quality permit (AQB review)
- Gas plants/pipelines available for sour gas
- Special equipment/procedures requirements
- Other: _____

Comments: Big double derrick drilling rig or a small triple derrick drilling rig to drill to 7,575' TD. No special concerns.

Water Quality

(possible concerns)

Salt/oil based mud: Yes, freshwater and freshwater mud system on surface hole and salt saturated mud system on mainhole.
High water table: No
Surface drainage leads to live water: No, closest surface drainage is an unnamed ephemeral tributary to East Fork Wolf Creek, about 1 mile west of this location.
Water well contamination: No, all water wells shallower than surface casing setting depth of 1400'. Closest water wells to this location are clustered, about 5/8 of a mile to the northeast and about 1 mile to the south, depth of these wells are less than 250'. Surface hole will be drilled with freshwater and surface casing set and cemented back to surface from 1400'.
Porous/permeable soils: No, sandy clay soils.
Class I stream drainage: No

Mitigation:

- Lined reserve pit
- Adequate surface casing
- Berms/dykes, re-routed drainage
- Closed mud system
- Off-site disposal of solids/liquids (in approved facility)
- Other: _____

Comments: 1400' of surface casing cemented to surface adequate to protect freshwater zones.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings: None

High erosion potential: No, small cut up to 3.5' and small fill, up to 5.5' required.

Loss of soil productivity: No, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.

Unusually large wellsite: No, 300'X400' location size required.

Damage to improvements: Slight

Conflict with existing land use/values: Slight

Mitigation

Avoid improvements (topographic tolerance)

Exception location requested

Stockpile topsoil

Stream Crossing Permit (other agency review)

Reclaim unused part of wellsite if productive

Special construction methods to enhance reclamation

Other _____

Comments: Using existing county road, Volt Road and existing section line road. Will have to build about 490' of new access road into location off existing section line road. Drilling and completion fluids will be recycled to the next location the remaining fluid will be hauled to a commercial Class II disposal. Cuttings will be left in the lined pit. Cuttings and pit will be buried after being allowed to dry. No special concerns

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: Buildings and residences about 5/8 of a mile to the northeast of this location, at Volt, Montana.

Possibility of H2S: Yes

Size of rig/length of drilling time: Big double or small triple drilling rig/moderate 20 to 30 days drilling time.

Mitigation:

Proper BOP equipment

Topographic sound barriers

H2S contingency and/or evacuation plan

Special equipment/procedures requirements

Other: _____

Comments: Proper BOP and adequate surface casing should mitigate any problems. No concerns.

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified): None identified.

Proximity to recreation sites: None identified.

Creation of new access to wildlife habitat: No

Conflict with game range/refuge management: No

Threatened or endangered Species: None identified.

Mitigation:

Avoidance (topographic tolerance/exception)

Other agency review (DFWP, federal agencies, DSL)

Screening/fencing of pits, drillsite

Other: _____

Comments: Private surface lands. No concerns.

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites: None identified.

Mitigation

avoidance (topographic tolerance, location exception)

other agency review (SHPO, DSL, federal agencies)

Other: _____

Comments: On private lands. No concerns.

Social/Economic

(possible concerns)

Substantial effect on tax base

Create demand for new governmental services

Population increase or relocation

Comments: No concerns.

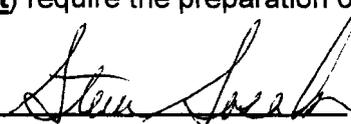
Remarks or Special Concerns for this site

Well is a 7,575' TD vertical Nisku Formation test in Roosevelt County.

Summary: Evaluation of Impacts and Cumulative effects

No significant long term impacts expected, some short term impacts are expected.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki 

(title:) Chief Field Inspector

Date: June 9, 2008

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Roosevelt County water wells

(subject discussed)

June 9, 2008
(date) _____

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

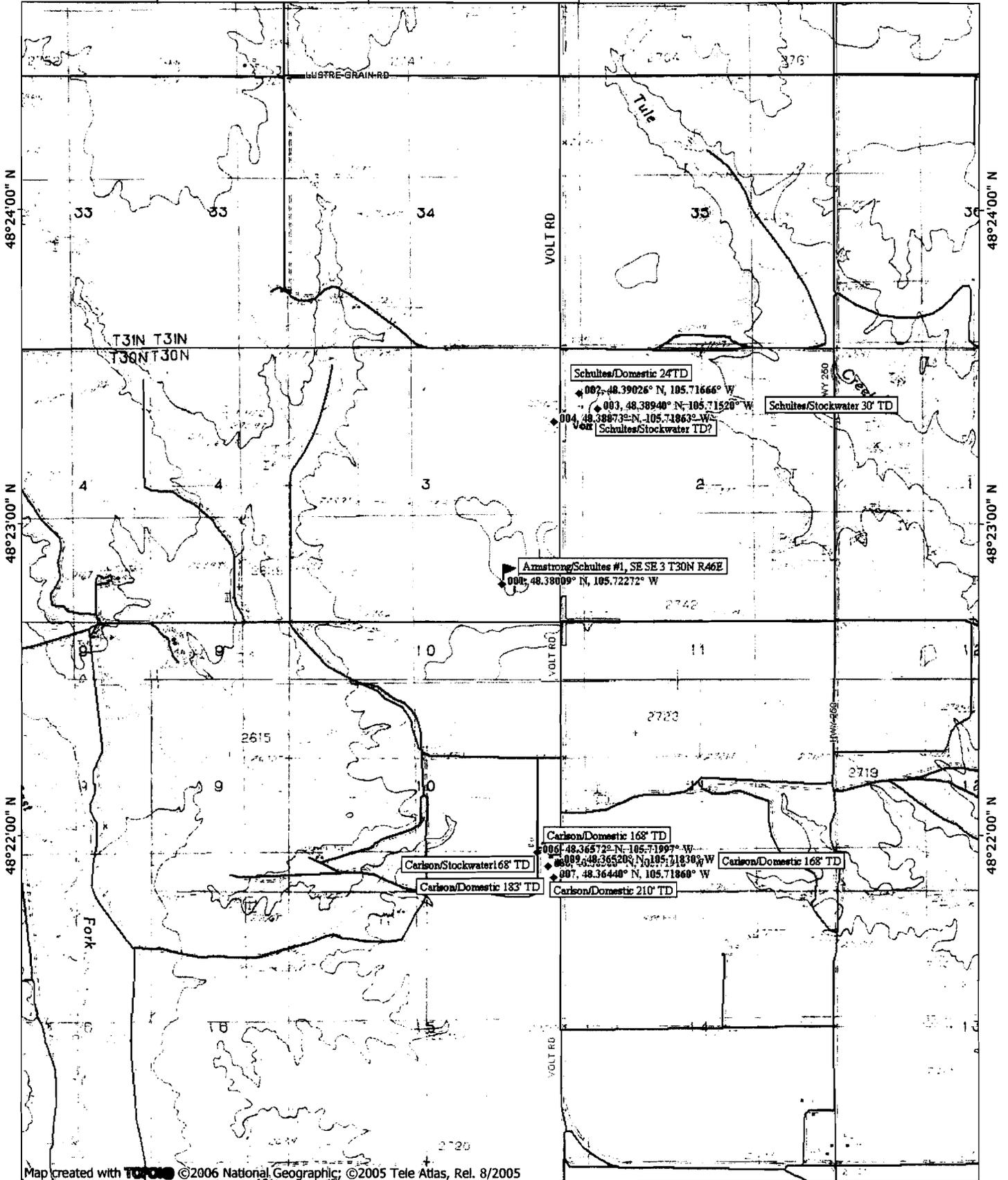
Others present during inspection: _____

105°45'00" W

105°44'00" W

105°43'00" W

WGS84 105°42'00" W



48°24'00" N

48°24'00" N

48°23'00" N

48°23'00" N

48°22'00" N

48°22'00" N

Map created with TOPO! ©2006 National Geographic; ©2005 Tele Atlas, Rel. 8/2005

105°45'00" W

105°44'00" W

105°43'00" W

WGS84 105°42'00" W

**NATIONAL
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TN 11° MN

06/09/08